

OIPE

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/977,066

DATE: 11/06/2001
TIME: 10:56:29

Input Set : A:\seqlist.txt
Output Set: N:\CRF3\11062001\I977066.raw

3 <110> APPLICANT: THUDIUM, Kent
4 SELBY, Mark
6 <120> TITLE OF INVENTION: CYTOMEGALOVIRUS INTRON A FRAGMENTS
8 <130> FILE REFERENCE: 2302-16095 / PP16095.002
C--> 10 <140> CURRENT APPLICATION NUMBER: US/09/977,066
C--> 11 <141> CURRENT FILING DATE: 2001-10-12
13 <150> PRIOR APPLICATION NUMBER: 60/240,502
14 <151> PRIOR FILING DATE: 2000-10-13
16 <160> NUMBER OF SEQ ID NOS: 8
18 <170> SOFTWARE: PatentIn Ver. 2.0
20 <210> SEQ ID NO: 1
21 <211> LENGTH: 838
22 <212> TYPE: DNA
23 <213> ORGANISM: Artificial Sequence
25 <220> FEATURE:
26 <223> OTHER INFORMATION: Description of Artificial Sequence: full length

ENTERED

27 intron A
29 <400> SEQUENCE: 1
30 gtaagtaccg cctatagact ctataggcac acccctttgg ctcttatgca tgctatactg 60
31 tttttggctt ggggcctata caccgccgct ccttatgcta taggtgatgg tatagcttag 120
32 cctatagggtg tgggttattg accattattg accactcccc tattgggtgac gatactttcc 180
33 attactaatc cataacatgg ctctttgcca caactatctc tattggctat atgccaatac 240
34 tctgtccttc agagactgac acggactctg tatttttaca ggatggggtc ccatttatta 300
35 tttaaaaatt cacatataca acaacgccgt ccccggtgcc cgcagttttt attaaacata 360
36 gcgtggggtc tccacgcgaa tctcgggtac gtgttcggga catgggctct tctccggtag 420
37 cggcggagct tccacatccg agccctggtc ccatgcctcc agcggctcat ggtcgcctcg 480
38 cagctccttg ctcttaacag tggaggccag acttaggcac agcacaatgc ccaccaccac 540
39 cagtgtgccc cacaaggccg tggcggtagg gtatgtgtct gaaaatgagc tcggagattg 600
40 ggctgcgacc gtgacgcaga tgggaagactt aaggcagcgg cagaagaaga tgcaggcagc 660
41 tgagttggtt tattctgata agagtcagag gtaactcccc ttgcggtgct gttaacggtg 720
42 gagggcagtg tagtctgagc agtactcgtt gctgcgcgcg gcgccaccag acataatagc 780
43 tgacagacta acagactggt cctttccatg ggtcttttct gcagtcaccg tcgtcgac 838

45 <210> SEQ ID NO: 2
46 <211> LENGTH: 100
47 <212> TYPE: DNA
48 <213> ORGANISM: Artificial Sequence
50 <220> FEATURE:
51 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
52 oligo for substitution of nucleotides 52-740 of
53 Intron A
55 <400> SEQUENCE: 2
56 atgcatctcg ttgctgcccgc gcgcgccacc agacataatc gctgacacac tgacagactg 60
57 ttccttttct tttttttttt ttgcagtcac cgctgcgcag 100
59 <210> SEQ ID NO: 3
60 <211> LENGTH: 145
61 <212> TYPE: DNA
62 <213> ORGANISM: Artificial Sequence

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/977,066

DATE: 11/06/2001
TIME: 10:56:29

Input Set : A:\seqlist.txt
Output Set : N:\CRF3\11062001\I977066.raw

```

64 <220> FEATURE:
65 <223> OTHER INFORMATION: Description of Artificial Sequence: Deletion
66     mutant pCON3 Intron
68 <400> SEQUENCE: 3
69 gtaagtaccg cctatagact ctataggcac acccctttgg ctcttatgca tctcgttgct 60
70 gccgcgcgcg ccaccagaca taatcgctga cacactgaca gactgttctt ttcctttttt 120
71 tttttttgca gtcaccgctg tcgac
73 <210> SEQ ID NO: 4
74 <211> LENGTH: 2170
75 <212> TYPE: DNA
76 <213> ORGANISM: Artificial Sequence
78 <220> FEATURE:
79 <223> OTHER INFORMATION: Description of Artificial Sequence: major
80     immediate-early gene of hCMV
82 <400> SEQUENCE: 4
83 ctgcagtga taataaaatg tgtgtttgtc cgaaatacgc gttttgagat ttctgtcgcc 60
84 gactaaattc atgtcgcgcg atagtgggtg ttatcgccga tagagatggc gatattggaa 120
85 aaatcgatat ttgaaaatat ggcataattg aaatgtcgcc gatgtgagtt tctgtgtaac 180
86 tgatatacgc atttttccaa aagtgatttt tgggcatacg cgatatctgg cgatacggct 240
87 tatatcgttt acgggggatg gcgatatagc actttggcga cttgggcatg tctgtgtgtc 300
88 gcaaataatc cagtttcgat ataggtgaca gacgatatga ggctatatcg ccgatagagg 360
89 cgacatcaag ctggcacatg gccaatgcac atcgatctat acattgaatc aatattggca 420
90 attagccata ttagtcattg gttatatagc ataaatcaat attggctatt ggccattgca 480
91 tacgtttgat ctatatcata atatgtacat ttatatggc tcatgtccaa tatgaccgcc 540
92 atgttgacat tgattattga ctagtattta atagtaatca attacggggt cattagtcca 600
93 tagcccatat atggagttcc gcgttacata acttacggtg aatggcccgc ctcgtgaccg 660
94 cccaacgacc ccgcgccatt gacgtcaata atgacgtatg ttcccatagt aacgccaata 720
95 gggactttcc attgacgtca atgggtggag tatttacggt aaactgccc cttggcagta 780
96 catcaagtgt atcatatgcc aagtcgggcc ccctattgac gtcaatgacg gtaaatggcc 840
97 gcgcctggcat tatgcccagt acatgacctt acgggacttt cctacttggc agtacatcta 900
98 cgtattagtc atcgctatta ccatgggtgat gcggttttgg cagtacacca atgggcgtgg 960
99 atagcgggtt gactcacggg gatttccaag tctccacccc attgacgtca atgggagttt 1020
100 gttttggcac caaaatcaac gggactttcc aaaatgtcgt aataacccc ccccggtgac 1080
101 gcaaatgggc ggtaggcgtg tacggtggga ggtctatata agcagagctc gtttagtgaa 1140
102 ccgtcagatc gcctggagac gccatccacg ctgttttgac ctccatagaa gacaccggga 1200
103 ccgatccagc ctccgcggcc gggaaacggtg cattggaacg cggattcccc gtgccaaagag 1260
104 tgacgtaagt accgcctata gactctatag gcacacccct ttggctotta tgcatgctat 1320
105 actgtttttg gcttggggcc tatacacccc cgctccttat gctatagggt atggtatagc 1380
106 ttagcctata ggtgtgggtt attgaccatt attgaccact cccctattgg tgacgatact 1440
107 ttccattact aatocataac atggctcttt gccacaacta tctctattgg ctatatgcca 1500
108 atactctgtc ctccagagac tgacacggac tctgtatttt tacaggatgg ggtcccatct 1560
109 attatttaca aattcacata tacaacaacg ccgtcccccg tgcccgcagt ttttattaaa 1620
110 catagcgtgg gatctccacg cgaatctcgg gtacgtgttc cggacatggg ctcttctccg 1680
111 gtageggcgg agcttccaca tccgagccct ggtcccatgc ctccagcggc tcatggctgc 1740
112 tcggcagctc cttgtccta acagtggagg ccagacttag gcacagcaca atgccacca 1800
113 ccaccagtgt gccgcacaag gccgtggcgg tagggtatgt gtctgaaaat gagctcggag 1860
114 attgggctcg caccgtgacg cagatggaag acttaaggca gcggcagaag aagatgcagg 1920
115 cagctgagtt gttgtattct gataagagtc agaggttaact cccgttgccg tgctgttaac 1980
116 ggtggagggc agtgtagtct gagcagtact cgttgctgcc gcgcgcgcga ccagacataa 2040

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/977,066

DATE: 11/06/2001

TIME: 10:56:29

Input Set : A:\seqlist.txt

Output Set: N:\CRF3\11062001\I977066.raw

```

117 tagctgacag actaacagac tgttcctttc catgggtctt ttctgcagtc accgtccttg 2100
118 acacgatgga gtcctctgcc aagagaaaga tggaccctga taatcctgac gagggccctt 2160
119 cctccaaggt                                     2170
121 <210> SEQ ID NO: 5
122 <211> LENGTH: 126
123 <212> TYPE: DNA
124 <213> ORGANISM: Artificial Sequence ✓
126 <220> FEATURE:
127 <223> OTHER INFORMATION: Description of Artificial Sequence: wild type
128     rabbit beta-globin ✓
130 <400> SEQUENCE: 5
131 gttggtatcc tttttacagc acaacttaat gagacagata gaaactggtc ttgtagaaac 60
132 agagtagtcg cctgcttttc tgccaggtgc tgacttctct cccctgggct gttttcattt 120
133 tctcag                                     126
135 <210> SEQ ID NO: 6
136 <211> LENGTH: 127
137 <212> TYPE: DNA
138 <213> ORGANISM: Artificial Sequence ✓
140 <220> FEATURE:
141 <223> OTHER INFORMATION: Description of Artificial Sequence: optimized
142     rabbit beta-globin ✓
144 <400> SEQUENCE: 6
145 gtaagtatcc tttttacagc acaacttaat gagacagata gaaactggtc ttgtagaaac 60
146 agagtagtcg cctgcttttc tgccaggtac taacttctct cccctctcct cttttctttt 120
147 tctgcag                                     127
149 <210> SEQ ID NO: 7
150 <211> LENGTH: 19
151 <212> TYPE: DNA
152 <213> ORGANISM: Artificial Sequence ✓
154 <220> FEATURE:
155 <223> OTHER INFORMATION: Description of Artificial Sequence: primer
156     KBT-162
158 <400> SEQUENCE: 7
159 cgctgttttg acctccata                                     19
161 <210> SEQ ID NO: 8
162 <211> LENGTH: 20
163 <212> TYPE: DNA
164 <213> ORGANISM: Artificial Sequence ✓
166 <220> FEATURE:
167 <223> OTHER INFORMATION: Description of Artificial Sequence: primer
168     KBT-163
170 <400> SEQUENCE: 8
171 gttgagcaat tcacgttcat                                     20

```

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/977,066

DATE: 11/06/2001

TIME: 10:56:30

Input Set : A:\seqlist.txt

Output Set: N:\CRF3\11062001\I977066.raw

L:10 M:270 C: Current Application Number differs, Replaced Application Number
L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date